

NC 17391
B&W 5288.00014

**METHOD AND APPARATUS FOR ADDRESS ALLOCATION IN GPRS
NETWORKS THAT FACILITATES END-TO-END SECURITY**

ABSTRACT OF THE DISCLOSURE

A General Packet Radio System (GPRS) -based communications network that includes a Serving GPRS Support Node (SGSN) and a Gateway GPRS Support Node (GGSN) assigns an IPv4 address to a mobile station in a GPRS-based network that conserves IPv4 addresses and simultaneously maintains end-to-end security and application friendliness. The SGSN receives from a mobile station an Activate PDP Context Request message having an APN field that requests a private or a public network address. The SGSN then sends a Create PDP Context Request message to the GGSN. The GGSN assigns a private or a public network address to the mobile station, and sends a Create PDP Context Response message to the SGSN. In turn, the SGSN sends an Activate PDP Context Accept message to the mobile station assigning a private or a public network address to the mobile station.